# IU Libraries Discovery Layer Advisory Group
# Progress Report

June 25, 2018

## Introduction: Intention of Document and Scope

As of May 2018, we mark five years of providing the primary public interface for IUCAT via our discovery layer interface powered by the open source web application Blacklight. The SirsiDynix Symphony OPAC interface which had been branded as IUCAT Classic since the release of the Blacklight interface in May 2013, was retired in December 2017.

This document reports on progress since the 2014 report, *IU Libraries Discovery Layer Implementation Task Force Progress Report and Recommendations*[1], and makes recommendations for enabling ongoing system-wide input into the development of the catalog discovery interface into the future.

Appendices include information about the charge and membership of the Discovery Layer Advisory Group (DLAG), and an annotated list of the remaining items flagged as "Not yet completed" in the annotated Rubric for Core Functionality prepared for the 2014 report, *IU Libraries Discovery Layer Implementation Task Force Progress Report and Recommendations*.

## Blacklight IUCAT: Progress Report since June 2014

Development on the new IUCAT began in fall 2011, with a public beta launch in January 2013. In addition to baseline functionality such as the ability to search using multiple indexes, to print, email or text item information, and patron empowerment functions (renew, request), a number of enhancements were implemented that significantly improved the patron experience as compared to the legacy SirsiDynix OPAC interface; work completed through spring 2014 was detailed in the aforementioned *Progress Report & Recommendations*.

In addition to the specifics described below, the Enterprise Library Systems team has regularly released incremental changes and improvements to functionality across the application, particularly as regards indexing and compliance with accessibility standards. The following list of enhancements and improvements appears in chronological order.

- **Major Upgrades & Infrastructure Improvements**
    - December 2014: The Blacklight web application was upgraded from version 3.4.1 to version 5.4. In addition to some technical gains, the most noticeable outcomes for users were a redesigned mobile-ready responsive interface, and the ability to save searches and bookmarks across sessions.
    - Fall 2015: Enabled IUPUI University Library users to request purchase via OpenURL linking in catalog records for that collection; and implemented support for Aeon request system for IUB Lilly Library, including establishing requirements for XML versions of catalog records for use in staff client and for OpenURL linking for Lilly catalog records.

[1] http://hdl.handle.net/2022/20383

  - Fall 2016: Real-time updates [indexing and catalog data changes (includes changes, additions, deletions) processed intermittently throughout the day in real time].
  - Fall 2016: IUCAT API released.
  - Early 2017: SSL/HTTPS for IUCAT released.
  - May 2017: An overall upgrade was completed for the Blacklight catalog discovery layer (to version 6) and its underlying infrastructure (Solr 6), which included an interface update that complied with current IU brand standards and refreshed the interface's look and feel.

- **IUCAT Classic**
  - **Transition to Search-Only:** In December 2014, IUCAT Classic became a search-only interface; users could no longer log in to access account information, renew items, or access e-resources from off campus. This reduction in functionality was preparatory to the Sirsi OPAC's eventual retirement with the expected upcoming move to Kuali OLE.
  - **Retirement**: In December 2017, due to the fact that all of the major functions of the SirsiDynix user interface were available via the IUCat Blacklight interface, including browse and course reserves, IUCAT Classic was deactivated. Alternate access for the few remaining staff-only functions that require the SirsiDynix OPAC continues to be available via https://iucat.iu.edu/staff-pin.

- **Folders:** In 2014, the consulting group DCE was contracted to develop functionality for Blacklight that enabled the creation and editing of persistent, shareable lists. Since the release of this enhancement in March 2015, logged-in users have been able to keep items for use in later sessions, create multiple lists or folders in which to store items, and share those folders publicly if desired.

- **Newly Added Titles:** Users can filter results to display titles added to the collection in the last 30, 90 or 180 days (released June 2015).

- **Improvements to off-campus access to proxied resources:** The proxy redirector is bypassed in cases where there is a campus code appearing in the selected URL (e.g. EAST, BLOOMINGTON). The patron is sent directly to the selected URL's designated campus proxy server (released summer 2015).

- **EBSCO Discovery Service integration (IUCATplus Bloomington):** An enhanced catalog view was developed to enable users to search IUCAT & OneSearch@IU simultaneously (piloted for the Bloomington campus only in fall 2015).

- **IUCAT Browse:** A browse interface was launched in June 2016 (https://iucat.iu.edu/browse), which enables structured retrieval of results for Author-Title, Series and Subject.

- **Improvements to My Account & Request Delivery:** In Fall 2016, a redesign of the My Account screen was released which included improvements to print layout/styling, clearer messaging for non-renewed items (highlighting non-renewable titles at top of screen) and display of pending ALF Requests, clearing up a long-time point of confusion for users. In 2017, improvements to request delivery services were released that better accommodated records simultaneously eligible for Request Delivery, ALF Requests and Aeon/Lilly Library Requests, and records with mixed formats.

- **Course Reserves**: A custom view (https://iucat.iu.edu/reserves) was built from scratch to enable display of course reserves items via the Blacklight interface; this view has custom facets (instructor, course name, etc.). It was released in beta in spring 2017 and became the sole interface in fall 2017.

- **Improvements to Advanced Search**: A complete re-architecture of the Advanced Search functionality in 2017 resulted in a more complete ability to modify and edit all search parameters for advanced search, increased capacity to construct complex searches, and a more streamlined interface for Advanced Search.

- **E-Book Format**: As of May 2018, users can now make use of an 'e-book' format to filter results using the Format facet; this new format displays in bib records and search results.

- **PFW Transition:** As part of the transition of the IPFW campus from the shared governance of IU and Purdue to solely Purdue, the holdings of the IPFW Helmke Library were migrated into an independent online library catalog. Access to IUCAT My Account services, including online renewal, account review, etc., was terminated in May 2018, and the IUCAT Fort Wayne campus view was deactivated in June 2018.

### Next Steps

Enhancement priorities for the coming months include:

- **Music View**: Using descriptive data elements in bibliographic records, the Music View will provide enhanced filtering capabilities to allow users to focus their searches on specific details pertaining to the format of music materials, such as instrumentation, type of music score, or format of sound recording.
- **Location Geo-Mapping**: Updates are proposed to item information such that location and contact information will be available for each library.
- **Updates and Revisions to Bibliographic Record Display**: A refresh to the layout for the bibliographic record screen is planned to increase usability.

## Looking Forward: Notes and Recommendations

- The DLAG has met approximately quarterly since its inception; that schedule, together with email contacts as needed, has been effective in maintaining open lines of communication across the system on matters related to the IUCAT public interface and in ensuring prompt feedback to the development team.
- In May 2017, it was decided that DLAG members should serve two year terms on a fiscal year schedule; initial appointments were staggered. There are no term limits. Initial terms for members are noted in Appendix A.
- In the view of the advisory group, there are no concerns related to the ongoing viability of Blacklight. The community is active, regularly planning events,[2] and use of the application has been extended beyond library catalog discovery interfaces.
- Given that there is no longer a plan to implement the Kuali Online Library Environment (OLE) system, the charge of the DLAG should be updated to remove references to that specific migration. However, it is important that the DLAG be engaged in any decision-making process related to future ILS/LSP migrations. The charge of the DLAG was due to be reviewed in May 2017, but other circumstances prevented changes being made at that time.
- For future development, priority should be given to the integration of multiple delivery options into discovery in order to simplify the user experience. The most obvious of these integrations is Interlibrary Loan (ILL). Ultimately, IUCAT should be "smart" enough to present the correct option to the user based on the item and the policies applied to that item. For instance, if an item is not available for Request Delivery, the IUCAT "Request This" button should enable the user to connect to the appropriate campus ILL system and automatically populate the appropriate request form.
- It is the view of the current membership of the DLAG that this group has been productive and successful, and is well positioned to provide ongoing system-wide input into the development of the catalog discovery interface into the future. Further, the members feel that this group should be an integral part of any future enterprise library system migration project.

Respectfully submitted,

Tina Baich, IUPUI
Terri Bennett, IU Medicine
Rachael Cohen, IUB
Vincci Kwong, IUSB
Randy Lent, IUB
Courtney Greene McDonald, IUB [chair]
Sue McFadden, IUE
Kate Moore, IUS
Chuck Peters, IUB
Angie Pusnik, IUK
Ed Seykowski, IUN
Sue Skekloff, IPFW/PFW
Thomas Whittaker, IUB
Emily Dill, IUPUC interim representative

[2] Examples: Blacklight Summit, Princeton NJ, July 2018 - http://library.princeton.edu/blacklight-summit; Blacklight European Summit, Copenhagen Denmark, October 2017 - http://projectblacklight.org/european-summit-2017

**Appendix A: Discovery Layer Advisory Group: charge, membership, etc.**

**Discovery Layer Advisory Group –** formed August 24, 2015

**Purpose:**
The Discovery Layer Advisory Group (DLAG) will serve as a standing advisory group on issues related to the IU Libraries discovery system and of the Online Library Environment (OLE) system migration that are related to discovery. DLAG will work closely with the IU Bloomington Libraries' Discovery & Research Services staff and University Information Technology Services Library Information Systems team and with OLE migration groups.

**Background**:
Following up on recommendations of the IU Library Discovery Layer Task Force, the Library Systems Executive Steering Committee is charging this group to represent the needs of libraries throughout the IU Library system.

**Goals**:
The goal of charging DLAG is to foster a broad and informed perspective of user needs and functionality requirements for IUCAT. In addition, the members of DLAG are responsible for developing knowledge of the Blacklight discovery layer system and the OLE system so that they can provide informed guidance to those responsible for implementation.

**Charge**:

- Develop and grow expertise in the details of how the discovery layer integrates with the OLE system.
- Provide comments and feedback as needed in a timely manner.
- Assist with communications and notifications.
- As appropriate identify new or temporary advisory group members to address specialized or unique issues.
- Develop a basic and practical understanding of user testing best practices and participate in user testingas well as recruiting for user testing.
- Attend meetings regularly, meet deadlines for input, and read all email and communication shared among this group.

**Time frame:**
DLAG will be called together in August 2015. Membership and the charge will be reviewed and modified as needed in May 2017.

**Origin of the charge:**
Charge drafted by the IU Library Systems Executive Steering Committee and approved by the IU Council of Head Librarians May 2015.

**DLAG Membership**

Tina Baich, IUPUI – initial term through June 30, 2018
Terri Bennett, IU Medicine – initial term through June 30, 2018
Rachael Cohen, IUB – initial term through June 30, 2019
Vincci Kwong, IUSB – initial term through June 30, 2019
Randy Lent, IUB – initial term through June 30, 2018
Courtney McDonald (Chair), IUB – initial term through June 30, 2019
Sue McFadden, IUE – initial term through June 30, 2018
Kate Moore, IUS – initial term through June 30, 2019
Chuck Peters, IUB Music – initial term through June 30, 2019
Ed Seykowski, IUN – initial term through June 30, 2019
Madelyn Shackelford Washington, IUPUC *[left IU 2017]*
Emily Dill, IUPUC (interim) – initial term through June 30, 2018
Sue Skekloff, IPFW *[PFW separation 2018]* – initial term through June 30, 2018
Angie (Thorpe) Pusnik, IUK – initial term through June 30, 2019
Thomas Whittaker, IUB – initial term through June 30, 2018
Christina Wray, IIDC *[left IU 2017]*

**Appendix B: Progress Report**

Below, find the status as of July 1, 2018, of the remaining items flagged as "Not yet completed" in the annotated Rubric for Core Functionality prepared for the 2014 report, *IU Libraries Discovery Layer Implementation Task Force Progress Report and Recommendations* [drawn from the original rubric prepared for the *IU Libraries Discovery Layer Task Force Summary Report & Recommendation* (2011)[3]].

Looking back on the original rubric seven years later we feel, as noted in the previous report, that a number of the requirements assume a different search paradigm than how Blacklight works and thus may be less applicable than first thought, or may simply just represent a different conceptual framework for search and discovery that no longer represents current expectations and preferences.

Key:

**Completed**
Not yet completed – not currently in development
Not yet completed – currently in development
Out of scope for this review
~~Specification now deemed irrelevant~~

## A. General Features/Functionality

This section provides required and desired features and functionalities of the overall interface of the discovery layer as well as features and functionalities not easily classified under the other four rubric categories.

The following specifications are **required** for implementation:

- Interface must readily accessible to persons with disabilities, defined as being ADA-compliant and compatible with major screen readers and other commonly used accessibility software.
- Must have an interface that is optimized for use on various mobile devices.
- The ability to customize the display of MARC fields for
    - specific campuses or libraries,
    - and for bibliographic record views (i.e. having a "simple" and full record view).
    - ~~End-users must have the ability to customize the display of MARC fields for bibliographic records.~~

The following specifications are **highly desirable** for implementation:

- ~~Users should be able to tag records with their own descriptors. These descriptors would then be searchable by any user through the main interface. The ability for users to comment on, describe, and/or rate resources would also be desirable.~~

## B. Account Management & Authorization

Many of these functions are highly reliant upon the underlying ILS, and are crucial to

[3] http://hdl.handle.net/2022/13621

maintaining a baseline level of patron services. The Task Force feels that these functions should be first be ported in from SirsiDynix and later provided by the circulation module/functions within OLE, currently to be developed.

Ultimately, public acceptance of the new interface for IUCAT and for the OLE project is dependent upon our ability to integrate with existing local systems used to facilitate identity management, to provide critical patron services related to account management, such as request delivery, holds management, renewals, etc., and to facilitate off-campus access to campus-specific electronic subscription-based resources.

The following specifications are **required** for implementation of the new OLE discovery layer:

- Account management services and access to personal information, such as
  - ALF Requests,

The following specifications are **highly desirable** for implementation:

- Individual patrons may review current status information for holds/requests on ALF items through "my account" (including author, title, available status, pick up library, ~~and expiration date).~~
- Individual patrons may indicate (yes/no check box) on holds/requests if the request should be referred to ILL if a copy is not available within the IU System.

The following specifications are **desirable** for implementation:

- Individual patrons may send a list of checkouts or holds to an email address.

## C. Export & Sharing

The following specifications are **required** for implementation:

- Ability to create multiple lists of resources (both public, shared lists and private lists).
- Data must be formatted such that it can be shared with multiple systems, such as
  - ~~other web-based citation services,~~
  - ILLiad, etc.
- Export records to citation software
  - ~~& other citation software etc~~
- Provide RSS feeds for new titles.

The following specifications are **highly desirable** for implementation:

- ~~Share records or lists via common social networking applications (Twitter, Facebook, etc).~~
- Catalog data made directly available as a web service (API).

The following specifications are **desirable** for implementation:

- Ability to sort lists by different criteria (format, title, author, pub date, subject, etc) ~~and to add user-generated data (tags, descriptions, comments).~~
- ~~Embed QR codes for each item record.~~

## D. Search Functionality & Results Display

General Search Functions

The following specifications are **required** for implementation:

- Ability to sort search results by
  - call number,
  - date published (ascending),
  - ~~date received,~~
  - author Z-A,
  - or title Z-A.
- Option to revise search on
  - the browse result screen.

The following specifications are **highly desirable** for implementation:

- Search History capability with an option to save, edit and re-execute the search.
- Allow for phrase searching using punctuation (e.g., paired single quotes to enclose a phrase) ~~and inclusion of standard positional search operators (adj, same, with, near) when constructing a search.~~
- ~~Allow the use of a number with standard positional operators to specify how many words apart the two terms can be.~~
- ~~Allow for searching within a particular field of a record by using punctuation or field name/code.~~
- ~~Nest terms by using punctuation such as parentheses ( ). Adding parentheses to a search tells the computer in which order keywords should be searched. Without parentheses, the computer will search the most specific operator first. The sequence from most to least specific is: adj, near, with, same, and, not, or.~~

Search Screens

The following specifications are **required** for implementation:

- Ability for patron to add search boxes (and to choose field to search from a drop down menu).

The following specifications are **highly desirable** for implementation:

- Ability to perform searches that can exclude criteria such as home location, classification scheme, type of medium, format, collection, language.

Browse Search Functions

The following specifications are **required** for implementation:

- Option for browse searching by author, title~~, periodical title~~, series, and subject (including LC subject, Medical Subject Headings, Kinsey subject headings) or call number using indexes

defined by librarians.

- If the Browse search does not find a match for the word(s) entered, it places you in the alphabetical sequence of entries nearest the place your entry would occur if it were there.
- On the browse screen results, display the number of records associated with that heading
- Clicking on a heading on the browse result screen will result in the search result screen if there is more than one record associated with that heading. These results may be sorted and may be limited by facets.
- Clicking on a heading on the browse result screen will result in the bibliographic record if there is only one record associated with that heading.

The following specifications are **desirable** for implementation:

- See related headings should appear on browse search results.

Search Results

The following specifications are **required** for implementation:

- Ability to request a book and designate pick-up location
  - ~~and to recall an item (for those libraries that provide that service) from the bibliographic record screen.~~

The following specifications are **highly desirable** for implementation:

- Recommend materials based on call numbers or other borrower's data on the bibliographic record similar to Amazon.
- Ability to link an item to a library map or campus map from the bibliographic record.



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